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PATENT ABSTRACTS OF JAPAN

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H01L 21/60(21) Application number: **63085755**(71) Applicant: **NEC CORP**(22) Date of filing: **06.04.88**(72) Inventor: **NANBU TETSUJI****(54) HEATER CHIP FOR BONDING****(57) Abstract:**

PURPOSE: To enhance the bonding strength by a method wherein two or more grooves are formed on a bonding face of a heater chip, the grooves are formed in the direction perpendicular to the bonding direction and a solder fillet is formed up to the upper part of a lead.

CONSTITUTION: A heater chip 1 for bonding use is made of a metal such as stainless steel, copper, molybdenum or the like; a groove 2 which is perpendicular to the bonding direction is formed in a bonding face; a mounting pad 5 plated with a solder or Sn on a printed-circuit board 6 and a metallic outer lead 3 such as gold, copper or the like of a semiconductor device are pressurized, heated and bonded by using this heater chip for bonding use. By this setup, the solder or Sn on the mounting pad is melted and flows to side parts and a part of the groove which is not pressurized; a bonding area is expanded; the bonding strength is enhanced.

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